CHAPTER TWO
Reinventing the St. Paul District

During the past thirty years, the Army Corps of Engineers has proven adept at embracing new missions to meet the changing needs of the nation. In particular, the Corps has responded to environmentalism. As early as the 1970s, the Corps' adaptability became the subject of an in-depth study by the Brookings Institution, *Can Organizations Change? Environmental Protection, Citizen Participation, and the Corps of Engineers*. The authors of the study were cautiously optimistic that the Corps could assimilate new environmental values into its varied missions and that its environmental mission could be translated into new programs.[1] In the following decades, the Corps moved toward more environmentally-sensitive approaches in its traditional work load involving river and harbor dredging and flood control projects, and, at the same time, the Corps came to occupy a central role in the growing federal commitment to protection of wetlands.

These impressive changes notwithstanding, the Corps faced additional challenges in demonstrating it could improve its efficiency. Efforts to downsize the federal bureaucracy and to trim the Department of Defense after the end of the Cold War fell heavily on the Army Corps of Engineers, especially in the 1990s. The Corps responded with successive plans and initiatives to streamline its decentralized administrative organization of divisions and districts, to revamp the way it conducted business and to stretch federal dollars by means of cost-sharing agreements with local sponsors.

The St. Paul District faced in microcosm the challenges that beset the whole Corps. Most of the pressure for organizational change came from Congress and from within the executive branch of the federal government; therefore, most of the direction to change sprang from the Corps' Headquarters Division, or HQUSACE, and emanated outward through the field divisions to the districts in the Corps' organization. However, the districts continued to serve as primary points of contact for members of Congress, so political pressures at the district level shaped the process of organizational change as well. In general, the St. Paul District underwent a transformation during the past thirty years in step with other Corps' districts and in response to national trends and developments.

Organizational change in the St. Paul District may be divided into two principal areas: *realignment* of the district's geographical boundaries (and, later, its transfer from one division to another); and modifications in the district's *internal organization*. This chapter examines organizational change in these two contexts. A third area of organizational change, which involves how the district and the Corps interact with other agencies, governments and nongovernment organizations, is addressed in Chapter Nine.

Realignment: The St. Paul District and the Corps

Like other resource management agencies, the Corps is a decentralized organization with offices and key personnel distributed widely throughout the United States so as to be near the resource and available to local and state officials and members of Congress in their respective districts. In the nineteenth century, officers were stationed in various cities, and the projects in their charge defined the geographic range of their respective offices. The Corps began to refer to projects as "districts" in the 1890s and gave names to the districts in 1908. It described the geographic boundaries of each district for the first time in 1913. The districts took shape within a divisional organizational structure, each district officer reporting to a division commander. There were five divisions in 1889, nine in 1908 and eleven by the end of World War II, while the number of districts fluctuated. After World War II, Congress reduced the number of districts.[2]

The St. Paul District dates to 1866, when Major Gouverneur Kemble Warren opened an engineer's office in St. Paul and initiated a survey of the Upper Mississippi River and its tributaries. The earliest description of the St. Paul District's boundaries included the Mississippi River drainage from the river's headwaters to the lower end of Lock 1 between St. Paul and Minneapolis, together with the Red River of the North drainage as far as the international boundary with Canada, and the Rainy River drainage in northern Minnesota, which encompasses the boundary waters area. The district was enlarged in 1919 by the addition of the Mississippi River from Lock 1 downstream to the mouth of the Wisconsin River. It was enlarged again in 1930 by the addition of the whole Wisconsin River drainage. The boundaries were extended further in 1940 to include more of the Mississippi River down to Lock and Dam 10 at Guttenberg, Iowa. A portion of the Upper Peninsula of Michigan draining into Lake Superior and Isle Royale were added to the District in 1941. The St. Paul District was originally part of the Northwest Division. It was transferred to the Upper Mississippi Valley Division and then to the North Central Division – where it remained when discussion about another reorganization of the Corps ensued in 1978.[3]

Realignment of District Boundaries

When the Corps examined alternatives for a realignment of districts and divisions in 1978, it was the largest such reorganization effort since World War II. The underlying reason for reorganization was recognition of the fact that the Corps had a declining work load. The era of large-scale water resource development projects had passed. Changing environmental considerations, coupled with rising construction costs, led to a steady winnowing and down-scaling of project proposals. Soon after taking office in 1977, President Jimmy Carter identified water resource development projects as some of the most egregious examples of the pork-barrel politics that he had promised to fight in his presidential campaign. Carter prevailed on Congress – particularly on the Democratic leadership – to cut many projects from the annual appropriation bill in 1977, and he vetoed the bill altogether in 1978. This political fight "left deep scars" and was one of the

primary sources of Carter's troubled relations with Congress, according to Carter's memoir.[4] But it established a precedent that subsequent presidents would follow – of challenging the close relationship that Congress had long enjoyed with the Army Corps of Engineers.[5] Thus, the Corps had to adjust to an uncertain future in which new projects would be smaller and more varied and appropriation bills would be sorely contested by Congress and the Administration.

Baldhill Dam, Sheyenne River, N.D.: The district operates and maintains approximately sixteen reservoirs for flood control and another thirteen locks and dams. (Photo by Kerry Horner, courtesy of St. Paul District, Corps of Engineers)

Another reason for reorganization was to bring the districts into better alignment with major river basins. Increasingly, river basins drew attention as rational geographic units for interagency planning, and river basin commissions were formed to guide such efforts. The Upper Mississippi River Basin Commission, established in 1972 by President Richard Nixon at the request of seven state governors, was one such body. The commission sought to improve public decision-making by bringing together ten different federal agencies that oversaw land and water resource programs in the river basin and by encouraging maximum participation by the public.[6] The growing emphasis on interagency regional planning caused the Corps to reexamine its district boundaries with the intent of making the Corps a more effective team player.

These two factors – declining work load and watershed management – led the Corps to study various alternatives for a nationwide reorganization of divisions and districts. Looking at the Upper Midwest, the Corps considered eliminating both the Rock Island and Chicago districts by dividing the Rock Island District between the St. Paul and St. Louis districts, and splitting the Chicago District between the St. Paul and Detroit districts. Either scenario would have added responsibilities and personnel to the St. Paul District and enlarged its profile on the Upper Mississippi River. Both scenarios encountered resistance by Illinois' congressmen, who did not want a closure of either Illinois office.[7]

Instead, a plan emerged in which the St. Paul District would be divided. On May 25, 1979, Major General Richard Harris, North Central Division commander, announced the reorganization plan for the Upper Midwest. He recommended transferring the area of the St. Paul District that drained into Lake Superior – parts of Minnesota, Wisconsin and the Upper Peninsula of Michigan, as well as Isle Royale – to the Detroit District. In addition, he proposed eliminating Chicago District, transferring the area that borders Lake Michigan to the Detroit District and transferring

the area comprising the Illinois River drainage to the Rock Island District. In concept, this proposal sought to allow the St. Paul District to focus on the Upper Mississippi River and to allow the Detroit District to focus on the Great Lakes. Rounding out this conceptual plan, Major General Harris proposed the transfer of the St. Louis District from the Lower Mississippi Valley Division to the North Central Division. The whole North Central Division was to benefit from this conceptual framework, in which three western districts (St. Paul, Rock Island and St. Louis) would share responsibility for the Upper Mississippi River all the way down to its confluence with the Ohio River, and two eastern districts (Detroit and Buffalo) would share responsibility for the Great Lakes.[8]

Although the plan had merit conceptually, it had little to recommend it politically. The Illinois politicians quickly blocked the move to close the Chicago office, and local interests in St. Louis successfully resisted the transfer of that district to the North Central Division, leaving just one part of Harris's proposal alive: the realignment of the St. Paul and Detroit districts. At issue was the Corps' presence in Duluth. Predictably, Congressman James Oberstar, whose congressional district included Duluth, opposed the transfer. Oberstar was close to the Corps. Before his election to Congress in 1974, he had served as administrative assistant to his predecessor, Congressman John Blatnik, and had been an administrator for the House Committee on Public Works from 1971 to 1974. He preferred to deal with an office in St. Paul rather than Detroit, and he pointed out that the St. Paul District in its present configuration served almost the whole state of Minnesota. However, Oberstar, a Democrat, received no support from Minnesota's other members of Congress. In the previous election year, the Republicans had campaigned on a platform of reduced government, and Minnesotans had elected two new Republican senators and a Republican governor, none of whom opposed the plan.[9] Moreover, the Carter Administration favored the realignment and Vice President Walter Mondale, Minnesota's most influential Democrat, was loyal to the administration initiative. Oberstar finally withdrew his opposition to the realignment after conferring by telephone with Mondale's office. The transfer was formally announced a few days later in mid-November 1979.[10]

What did the St. Paul District and the Corps gain or lose by this realignment? The harbor at the extreme western end of Lake Superior serves the cities of Duluth, Minnesota, and Superior, Wisconsin. Harbor improvements by the Corps date from 1867 in Superior and 1871 in Duluth. The ports were combined in 1896, and the facilities were subsequently expanded and modified by ten separate River and Harbor Acts, the latest (in 1960) authorizing the Corps to increase the depth of several channels and slips to accommodate deep-draft Great Lakes vessels. The Corps had completed most of the harbor-deepening project by 1968 at a cost of $14.5 million. All previous harbor improvements had amounted to $1.5 million, while the cost of maintenance from the first year they were authorized until 1979 was $18 million.[11] The harbor area is about 19 square miles and contains 17 miles of dredged channels. Most of the cargo shipped in and out of the harbor consists of iron ore, grain, coal and limestone. The extensive facilities and the amount

of commerce make this harbor one of the most important on the Great Lakes and in the nation.[12]

In 1979, the Duluth field office had an annual budget of $3.5 million and employed about a hundred people at peak season. Dredging and other activities contributed another $1.2 million to the area economy. Despite initial concern that the realignment would cost Duluth money and jobs, the personnel and dredging equipment in Duluth were not relocated. The Corps' personnel in the Duluth office accepted the change with equanimity; some happily anticipated a greater degree of autonomy in working under the supervision of the more distant Detroit office.[13] Duluth's port director, Davis Helberg, noted that dealing with Detroit would pose some logistical challenges but this could be offset by the Detroit District's greater involvement in Great Lakes operations.[14]

The realignment mainly impacted the St. Paul District office, where twenty-eight employees were slated for transfer to Detroit to supervise Duluth-area operations.[15] It resulted in the loss of several construction projects at a time when the St. Paul District already faced a declining work load. It also eliminated the district's most visible point of contact with the general public – the Marine Museum in Duluth, which attracted hundreds of thousands of visitors annually.[16] On the other hand, it allowed the St. Paul District to focus on rivers, as the reorganization plan had

Duluth jetties, Minnesota: Transfer of the Duluth harbor from St. Paul District to Detroit District took place in 1979. (Photo by Casondra Brewster, courtesy of Detroit District, Corps of Engineers)

originally conceived, and officials presumed that the Detroit District benefited by the infusion of expertise from St. Paul for managing projects on the Great Lakes.[17]

The challenge of leading the St. Paul District personnel through the process of realignment fell largely on the shoulders of the new district engineer, Colonel William W. Badger, who took command of the district in June 1979. The reduction in size of the district from four major watersheds to three, and its loss of the harbors on Lake Superior – which cut the district's dredging work by half – left Colonel Badger with limited options. He assumed charge of an office that was already top heavy with senior staff and imposed a virtual hiring freeze for two years. In the political climate surrounding the realignment, he found it difficult to be innovative. In an effort to justify more senior-level positions, he proposed to his division commander, Major General Harris, that his people could take responsibility for river dredging, geophysical investigations and hydropower studies for all districts in the North Central Division. The St. Paul District, Badger suggested, could even handle all small flood control projects throughout the division. Harris cautiously agreed that the St. Paul District would become one of the lead districts for low-head hydropower studies, but he could not make the St. Paul District a regional resource center for the other items on Badger's agenda. It was not possible, Harris explained, "in light of the reorganization decision."[18]

The search for projects required much of the district engineer's energy. Prior to his assignment to the St. Paul District, Colonel Badger had served the Chief of Engineers as special assistant for international programs. It was a new position, in which Colonel Badger had helped to develop a growing overseas program for the Corps largely funded by foreign governments. After his arrival in St. Paul, Badger tried to involve the St. Paul District in water conservation projects in Gabon, Nigeria, China and elsewhere overseas. This search for additional work outside the district brought little reward. By the end of his three-year tenure, Colonel Badger was focusing on planning, concerned about further reductions in the workload in the future. He had become worried that he would "not have the projects in the pipeline that will keep the district healthy in the future," he told an interviewer. "This may sound like survivalism, and in a way it is. I look at the district as a national asset, especially during a time of mobilization."[19]

Although the St. Paul District lost Duluth in the realignment of 1979, it survived; and in the 1980s, efforts to change the organizational structure of the Corps focused primarily on staff development, staff organization and project management – internal developments that will be discussed later in this chapter. These innovations could only go so far, however, in addressing the organizational problems that were evident in 1979: declining workload, rising overhead costs and, as a further consequence of the Corps' diminishing horizons, an aging professional workforce. Moreover, as military construction declined toward the end of the Cold War, the Army Corps of Engineers found another one of its primary missions fading. As a result, Corps' leader-

ship called for renewed discussion of a major reorganization of the Corps' field structure. This time, the St. Paul District was on the list for elimination.

The Reorganization Plan under the First Bush Administration

In 1988, the new Chief of Engineers, Lieutenant General Henry Hatch, initiated a comprehensive review of the Army Corps of Engineers' missions, goals and structure. He identified reorganization of the Corps' divisions and districts as a vital component of reinventing the Corps. The effort gained momentum with passage of the Energy and Water Development Appropriations Act of 1990, which directed the Corps to "initiate a broad-based conceptual study of potential field organizational structures." Congressional reports accompanying the appropriations bill for fiscal year 1991 reinforced this directive.[20]

In June 1990, Chief of Engineers Hatch formed a study team under Fred H. Bayley III, chief of engineering in the Vicksburg District, Lower Mississippi Valley Division, to develop alternative approaches to reorganization. The study team's report, called the Bayley Report, proposed five alternative conceptual approaches for reorganization: realignment, regionalization, decentralization, elimination of division offices and a "combination option." Pursuant to Congressional directive, the report was merely conceptual; it did not recommend specific changes that would impact one district or another. The Bayley Report was submitted to Congress on January 4, 1991.[21]

In the meantime, other developments were afoot that would have a crucial effect on the reorganization process and its outcome. With the end of the Cold War, the Department of Defense began to examine the need for reorganization of the entire U.S. military, with an emphasis on military installations that might be closed or consolidated. This wider effort commenced in mid-1988 after Secretary of Defense Dick Cheney established the Commission on Base Realignment and Closure, or BRAC Commission. Recognizing that base closures would affect local economies, that the economic consequences would fall unevenly across the nation and that the process would therefore become highly politicized, Congress attempted to cope with this problem in the Defense Authorization Amendments and Base Realignment and Closure Act of October 24, 1988, which provided that the Secretary of Defense and Congress must accept all or none of the recommendations by the BRAC Commission. However, this only raised the political stakes. Reluctant to accept the BRAC Commission's early recommendations, Congress passed the Defense Base Realignment and Closure Act of 1990, which established another commission to review the recommendations made by the Department of Defense. The latter commission's recommendations would also require approval or rejection in their entirety. As these developments were brewing in 1990, Corps' leadership began to consider whether the Corps' plan for reorganization should be incorporated into the BRAC plan. Given the way Congress had picked apart the Corps' previous reorganization effort in the late 1970s, it appeared that the BRAC process might offer

the Corps the best chance for pushing its own reorganization plan through Congress. As a result, when Acting Assistant Secretary of the Army (Civil Works) Dr. G. Edward Dickey submitted the Bayley Report to Congress on January 4, 1991, he averred that the next phase of the Corps' reorganization effort would be aimed at inclusion in the BRAC process.[22]

By this time, Chief of Engineers Hatch had formed a second reorganization study team for the specific purpose of hitching the Corps' effort to the BRAC Commission's wagon. Lieutenant General Arthur E. Williams headed the new team. While the team included many members of the Bayley team, it worked on an independent report using various methodological tools provided by the BRAC Commission, most notably a "D-PAD Model." In essence, the D-PAD computer analysis involved scoring each district and division on numerous capabilities and weighting the relative importance of those capabilities in order to determine the most efficient scenario for realignment. After the D-PAD analysis was completed, the team sought intuitive input from twenty-senior leaders in the organization "to supplement the purely analytical results" from D-PAD.[23] District leaders, however, were not invited to participate in the process.[24]

The Williams team worked from November 1990 to February 1991 and produced its own report, "The U.S. Army Corps of Engineers Reorganization Study." It made specific recommendations to realign the existing ten divisions and thirty-five districts in the contiguous United States into six divisions and twenty-two districts. The plan called for a parallel realignment of divisions for the Corps' civil works and military support missions, but division and district boundaries would conform to watershed boundaries for the civil works mission, whereas division boundaries would conform to state borders for the military support mission. Just one district in each division would be responsible for military construction throughout the division's jurisdiction (compared to fifteen districts with a military construction mission under the existing structure). The plan would eliminate 2,600 jobs and transfer 6,600 others. The authors estimated a cost for implementation of $266 million and annual savings of $112 million.[25]

The plan called for the closing of the St. Paul District together with twelve other districts. The St. Paul District would be combined with the Rock Island and St. Louis districts to form a single district for all of the Upper Mississippi River with its central office in St. Louis. The plan contemplated expansion of the North Central Division and relocation of its headquarters to Louisville, Kentucky.

The Williams team released the scores used in its D-PAD analysis together with its recommendations. These scores revealed that the St. Paul District ranked high in the two broad categories of "flexibility and expendability" and "quality of life/competence," – it had a skilled professional staff and it was admirably situated in St. Paul to take advantage of educational opportunities and other services. It was average in "operational efficiencies" – a general measure of the cost of doing work. Its score suffered, however, in the two broad categories of "mission essentiality" and "mission suitability." These categories reflected the basic problem of a declining workload, and the D-PAD analysis indicated that the St. Paul District was feeling that pinch more

than other districts. Indeed, the D-PAD analysis ranked the St. Paul District in twenty-first place among thirty-six civil works districts. (Districts with military construction were ranked separately.)[26]

As soon as the Corps' reorganization plan was completed, members of Congress whose districts would suffer the loss of a division or district office – including Congressman Bruce Vento (DFL-Minnesota), whose congressional district included St. Paul – began to pressure the Administration to scuttle the plan. They threatened to oppose the military base closures initiative if it included Corps' offices. Members of Congress argued that the Corps could not be included under BRAC because congressional oversight of the Corps fell to the Senate and House committees on public works, not the committees on armed services. Anxious to protect the BRAC process, Secretary of Defense Cheney announced in April that he would not propose the Corps reorganization plan. Although he supported it in principle, the Administration would not try to include the Corps' reorganization with the Administration's current push to close thirty-one military installations around the nation. Not content with Cheney's announcement, Congressman Vento went to Corps' headquarters in Washington, D.C., to confirm the plan was tabled. "There is no proposal or decision as of today to close the St. Paul District office," he told reporters afterwards.[27]

A month later, on May 24, 1991, Cheney announced the reorganization plan for the Corps. Although it was now separate from the base-closing plan submitted in April, there was no change in the Corps' approach.[28] Immediately the Corps' concept for reorganization fell under attack. Governor of Minnesota Arne H. Carlson and Governor of Wisconsin Tommy Thompson argued that the reorganization plan was poorly conceived; the Corps would be unable to provide the same quality of service from a remote location in Buffalo, New York, or St. Louis, Missouri.[29] Other critics charged that the reorganization plan was based on politics. For example, it seemed the St. Paul District and Rock Island District offices were to be consolidated with the St. Louis District office, the smallest of the three, because the latter happened to be located in the district of House Majority Leader Dick Gephardt. Congressmans Vento and Oberstar responded to Cheney's announcement by going to the chairman of the House appropriations subcommittee on energy and water development, Congressman Tom Bevill (D-Alabama), and obtaining a formal commitment that none of the Corps' appropriations for the next fiscal year could be used to close or relocate the St. Paul District office.[30]

At this point, the BRAC Commission entered the debate over the Corps' reorganization plan. In a clear signal to Congress that it wanted to include the Corps within its purview, it invited various witnesses to testify at a June 5 hearing on the Corps' reorganization. On July 1, it made its recommendations on base closures. The recommendations included a provision that would allow Congress an opportunity to develop its own plan for reorganizing the Corps but at the expiration of one year (July 1, 1992) the Administration's reorganization plan for the Corps would go into effect under BRAC's authority. On July 10, President George H. W. Bush presented the BRAC Commission recommendations to Congress without comment on this provision.[31]

The Corps of Engineers Centre: A Brief History

The building that currently houses the Army Corps of Engineers, St. Paul District, enjoys a rich history, with ties to the flourishing fur trade industry of the nineteenth century; nationally renowned Minnesota architect Clarence Johnston; and Minnesota's favorite son, Charles Lindbergh.

The building at 333 Sibley in St. Paul was first constructed as an industrial structure to house the manufacturing and sales activities of the Gordon & Ferguson Company, a fur corporation first founded by Richards Gordon in 1854. In 1912, the company, under the leadership of Charles Gordon, Richards' son, began planning construction of the building at Sibley and 4th Street. Gordon hired the famed Minnesota architect, Clarence Johnston, for the project. At a cost of $250,000, the structure, named the Gordon & Ferguson Building, covered nearly half of a city block to the height of nine stories, with eight above ground and one below. The main entrance was originally located on Sibley Street. While housed in this structure, the Gordon & Ferguson Company prospered, even manufacturing the flight suit worn by Charles Lindbergh on his precedent-setting, non-stop flight from the United States to Paris in "The Spirit of St. Louis." By 1944, the Gordon & Ferguson Company had outgrown its residence, and it abandoned the building, leaving it vacant for nearly fifteen years.

In 1958, John J. Kaplan, president and treasurer of the Globe Paper Box Manufacturing Company of St. Paul, purchased and refurbished the structure, renaming it the Nalpak Building (Kaplan spelled backwards). Under their ownership, the structure housed mostly state offices, including the Minnesota Department of Administration, Records Management Division; the Minnesota Council on Developmental Disabilities; and the Minnesota Department of Human Rights. The Army Corps of Engineers, St. Paul District, began leasing portions of the building in 1988 for eighty employees of the district's Construction-Operations Division. In 1993, after more than 53 years in the old Post Office, the St. Paul District adopted the building as its headquarters. The structure was completely renovated for the district and renamed the Corps of Engineers Centre.

Matt Pearcy, St. Paul District Historian (from 2001-2006)

In the fall of 1991, Congress passed a series of acts that firmly detached the Corps from the BRAC process and crushed the Corps' reorganization plan. First, it explicitly rejected the one-year deadline for developing a plan of reorganization for the Corps when it approved the BRAC recommendations on base closures. Second, it prohibited the expenditure of funds for closing Corps' division or district offices in both the public works and armed services appropriations bills. Finally, for good measure, it included a provision in the appropriations bill for 1992 that defined what could be considered a military installation under BRAC. A military installation did not include "any facility used primarily for civil works, rivers and harbors projects, flood control, or other projects not under the primary jurisdiction or control of the Department of Defense."[32]

In the spring of 1992, the Administration went back to the drawing board. Officials who had worked for months to develop a plan of reorganization under the BRAC process felt disappointed and chastened by Congress's action. Newly appointed Assistant Secretary of the Army (Civil Works) Nancy Dorn told a House committee in March 1992: "The message that Congress sent was clear. While there may be a need to reorganize the Corps to meet the challenges of the 21st century, the proposed plan was unacceptable and there should be an opportunity for Congressional involvement in any future plan." Congressman Vento, who impugned the previous year's effort as a "sort of top-down type of slam dunk effort to reorganize the Corps," welcomed Dorn's "fresh perspective."[33]

The Corps formed a field advisory committee to develop a new reorganization plan. In contrast to the Williams' team, the field advisory committee included representatives from every district and division. Louis E. Kowalski, Planning Division chief, served as the St. Paul District representative. After several months of data gathering, a smaller task force under the leadership of Brigadier General Albert J. Genetti, Jr. produced a report in July 1992. That same summer saw a change of Corps' leadership, according to the usual four-year rotation of the chief of engineers, Lieutenant General Arthur E. Williams, who had been closely involved with reorganization over the previous year-and-a-half, replaced Hatch. During September and October, he reviewed the new reorganization plan with the Assistant Secretary of the Army (Civil Works) and other Administration officials and released it on November 19, 1992, shortly after the election.

The new proposal reflected the influence of Congress. Districts would be given a robust standing in the new field organization while divisions would be consolidated and downsized. The number of divisions in the contiguous United States would be reduced from eleven to six, and the number of districts would be increased by one to thirty-six. However, some district capabilities would be consolidated: planning and engineering functions would be transferred from twenty-one districts to the remaining fifteen, which would be called Technical Centers.[34]

The St. Paul District was identified as one of the Technical Centers. Staff writers for the Minneapolis *News-Tribune* were quick to note the turnaround. "The St. Paul District office of the Army Corps of Engineers that was to all but close under a plan last year, instead will almost

double in size to more than 800 workers under a major restructuring," they wrote. District Engineer Richard W. Craig explained that the St. Paul office had been selected to be a technical center because it had a nearby airport and a significant technical staff already in place and it could obtain room to expand. (He was prepared to relocate the office from the old post office building to the Sibley Building at 5th and Sibley streets one block away.)[35]

Ironically, in developing a plan more to Congress's liking, the Corps cut itself off from the new Administration. Chief of Engineers Williams was premature in unveiling the plan two weeks after the election, without even a pause for consultation with President-elect Bill Clinton's nominees for Secretary of Defense or Secretary of the Army. One day after President Clinton took office, Secretary of Defense Les Aspin announced that the plan was withdrawn.[36]

Restructuring under the Clinton Administration

Chief of Engineers Williams gradually lowered the drumbeat for reorganization, despite the investment that he and so many other Corps' officials had put into it.[37] He was in an awkward position with the new Administration and needed to build credibility with Secretary of Defense Aspin and other incoming civilian political appointees in the Department of Defense. Moreover, he understood that the rank and file in the organization were tired of all the uncertainty and stress that had accompanied the reorganization effort and they needed a reprieve. Many people who worked under Williams were relieved when the new Chief told Congress he would prefer not to restudy the issue. The St. Paul District Commander, Colonel Craig, applauded Williams' position. The St. Paul office had been on a roller coaster ride – facing closure, then expansion and then uncertainty again – and Craig wanted to restore his staff's confidence. "We've been down at the lowest levels, and we've been at the highest levels," Craig told an interviewer. "We're on a norm now, and we recognize the turf that we're on, and, hopefully, we won't go up or down."[38]

The Clinton Administration made its effort to introduce organizational change in the Corps part of a much larger strategy of "reinventing government." In his election campaign, Clinton promised to make government work better while costing less money to the taxpayers. On March 3, 1993, Clinton requested Vice President Albert Gore head a task force of some two hundred people to conduct an intensive review of how the federal government performed. The effort, called the National Performance Review, had six months to make its report. After the task force completed its work in October, the Clinton Administration drafted legislation to implement various changes in government processes. The legislation addressed numerous agencies in all the departments of the executive branch. Clinton's plan for the Corps appeared in Section 3201 of the bill:

> The Secretary of the Army shall reorganize the U.S. Army Corps of Engineers by reorganizing the Headquarters offices, reducing the number of Division offices, and restructuring the District functions so as to increase the efficiency of the U.S. Army Corps of Engineers and reduce staff and costs, with the goal of achieving

approximately $50 million in net annual savings by fiscal year 1998.[39]

The legislation was eventually enacted as the Federal Workforce Restructuring Act of 1994.

The Clinton Administration's strategy for "restructuring" the Corps – a term it preferred to "reorganization" – followed from the National Performance Review. It focused on the headquarters and divisions and eliminated various functions that were redundant with functions carried out at the district level. For example, it divested the divisions of responsibility for technical review. It also worked on consolidating (regionalizing) human resources offices and finance offices in the Corps. These initiatives resulted in significant reductions of "full time equivalent" positions, or FTEs, in the headquarters and division offices. While some of these changes were anticipated, a decisive innovation in the Clinton plan was that it accomplished these changes using the "General Expenses" account in the Corps' budget, thereby obviating the need for Congress to approve a line item for the cost of "reorganization."[40] Moreover, by leaving all districts intact, it recovered control of the reorganization process from Congress. However, the problem of realigning the divisions and districts remained.

The Clinton Administration commenced its own study of reorganization of the Corps' field structure in June 1994, when Acting Assistant Secretary of the Army (Civil Works) John Zirschky called a conference of about two hundred people comprising division and district Corps' personnel and representatives of non-federal Corps' partners to examine relationships between headquarters, divisions and districts. For obvious reasons, this effort was accompanied by little fanfare. Eventually, the Clinton Administration arrived at a plan that did not differ too much from the plan the Corps unveiled in November 1992. Instead of reducing the number of divisions from eleven to six, they were reduced to eight. There were two significant innovations. Divisional offices in Portland and Omaha became regional offices, and all of the districts on the Mississippi River were combined under one command, the Mississippi Valley Division. As with the Clinton Administration's other restructuring efforts, this approach allowed the plan to be implemented using General Expense accounts of the headquarters and divisions. Rather than closing any division offices, they were converted (and downsized) to regional centers. The new divisional structure went into effect on April 1, 1997, with full implementation – expressed most simply in terms of reduced FTEs – to be accomplished by April 1, 2002.[41]

The divisional restructuring placed the St. Paul District in a new division. It was transferred from the North Central Division to the Mississippi Valley Division with headquarters in Vicksburg, Mississippi. The change was not entirely comfortable. Colonel J. M. Wonsik, district engineer, characterized the St. Paul District and the North Central Division as "introspective" in the way they conducted business, while the Mississippi Valley Division was "aggressive" in its practices. Concerned that his district risked losing its edge, he encouraged his staff to communicate more with their counterparts in the other districts within the Mississippi Valley Division and to learn from the district's "new neighbors." Wonsik advised his staff to examine what the dis-

tricts on the lower Mississippi River were doing and "steal shamelessly what other people are doing very, very well." He also wanted his people to take every opportunity to help those districts' staffs learn from them. In his view, realignment of the Mississippi Valley Division presented an opportunity for "cross-fertilization" between districts.[42]

Reorganization had a significant impact on employee morale and productivity. People feared for their jobs and all the discussion about redundancy and streamlining lowered people's sense of commitment. The concern about job loss was most critical in 1991, when Corps' leadership proposed to deactivate the St. Paul District. But the duration of the process upset people as well. In the mid-1990s, the office was under constant pressure to reduce FTEs, and people grew impatient with the continuing uncertainty as reorganization was simply held in abeyance. Finally, the divisional restructuring that took effect in 1997 provided a measure of relief by simply bringing an end to the process, but it too left a mark on the St. Paul District staff. It accentuated the St. Paul District's vulnerability even as districts strengthened their position within the organization. Change was unsettling. Although the realignment brought opportunity, it also caused insecurity. Wonsik told an interviewer in January 1998, with apparent misgivings, "It felt like we were traded from the [Minnesota] Vikings to the [Green Bay] Packers."[43] All factors combined, morale in the district probably reached a low point during Wonsik's tour from 1995 to 1998.

Changes in Internal Organization

Much of the restructuring that occurred under the Clinton Administration involved changing how staffs were organized within each office or how the Corps got its work done. Some of these initiatives flowed from the National Performance Review; other initiatives began much earlier. Like the reorganization effort, these internal organizational changes were made in response to two broad imperatives. First, the Corps sought to reinvent itself in light of its increasing role in environmental protection. Second, the Corps sought to change the way it managed civil works projects in order to perform more efficiently at less cost.

Addressing Environmentalism

The environmental movement of the 1960s and 1970s reflected profound shifts in public attitudes about the environment and resulted in numerous laws aimed at reforming society's relationship to the natural world. The American people's new environmental awareness extended into many areas, including wilderness preservation, endangered species protection, reduction of air and water pollution and hazardous waste cleanup. The broad-ranging issues that underpinned the environmental movement were as interwoven as they were varied. They stemmed from such broad societal trends as the nation's rising affluence in the post-World War II era, the increasing scientific understanding of ecology and the environment and the threats posed to humanity's very existence by the development of nuclear weapons, the pressures of population growth and the depletion of nonrenewable resources.[44] Practically all facets of environmentalism impinged on the Army Corps of Engineers' missions. Moreover, the Corps acquired new missions specifically

aimed at protecting the environment.

Environmentalism was an outgrowth of conservation, but it also differed from conservation in fundamental ways. Traditional conservation, which blossomed in the early twentieth century, posited that the federal government had a responsibility to protect and manage natural resources for efficient and sustainable use for the good of the nation. The conservation movement resulted in legislation directed at ensuring an efficient and democratic approach to resource development. In contrast to the great giveaway of public domain that characterized public land policy in the late nineteenth century, conservation laws in the early twentieth century emphasized the commons: water resources, forest lands, fish and wildlife, scenic wonders. One of the first great legislative acts of the conservation movement was the Reclamation Act of 1902, which sought to develop rivers for purposes of irrigating arid Western lands. A central tenet of the conservation movement was the role of the scientific expert in resource management. Fledgling federal agencies like the Reclamation Service and the Forest Service assembled staffs of experts in their respective scientific disciplines and emphasized centralized planning in resource development. The Corps of Engineers, long recognized for its expertise in river and harbor improvement, fit easily into the traditional conservation milieu.

This cartoon from a Sierra Club publication, published in the early 1970s, presents the Corps of Engineers as a large, powerful force that bullied small, weak environmentalists.

In contrast to the earlier conservation movement, the environmental movement of the 1960s and 1970s displayed a mistrust of federal resource management and a refusal to defer to scientific experts. More broadly, the new environmentalism emphasized the interconnectedness of the natural world. It doubted the ability of federal agencies concerned primarily with developing a single resource such as timber or water to consider the ramifications of their actions on the total environment. Indeed, environmentalists found that federal agencies such as the Forest Service, Atomic Energy Commission and Corps of Engineers were among the worst offenders against the environment.[45] Supreme Court Justice William O. Douglas did not mince words when he called the Corps of Engineers "public enemy number one."[46]

To address these concerns, Congress enacted the National Environmental Policy Act, or NEPA, of 1969. This law, the most important environmental legislation of the era, mandated federal agencies to coordinate their efforts in managing the nation's resources and to integrate public review and comment into all of their resource planning efforts. These guiding principles of national environmental policy recognized the need for a more holistic approach to the envi-

ronment as well as the need to make decision-making more public and democratic.[47] NEPA provided a clarion call for agencies such as the Army Corps of Engineers to reform their planning processes.

Various studies of the Corps have stated that the agency responded admirably to the new requirements mandated by NEPA. One study characterized the Corps' response as "sincere, swift, and impressive."[48] Another study praised the Corps for the amount of autonomy it gave to environmental analysts in conducting environmental reviews. An internal study by the Corps' Historical Division stated that the agency "developed new procedures to insure that environmental issues were properly addressed. Consequently the Corps became the first federal water resources agency to institutionalize environmental views."[49]

The critical provision of NEPA was the requirement that federal agencies produce an Environmental Impact Statement, or EIS, for each proposed action significantly affecting the environment. The EIS evaluated environmental impacts from the standpoint of various scientific and social-scientific disciplines to arrive at a well-rounded understanding of the consequences of an action. Rather than complain that the EIS requirement was onerous, the Corps built the EIS into its project authorization process and publicly stated that the EIS was helpful in allowing it to do a better job. The procedure for completing an EIS included an opportunity for public comment, so it deflected criticism that the Corps ignored public opinion.[50]

Corps' leadership at Headquarters initiated organizational changes to increase public participation and environmental sensitivity in Corps' decision-making, and the divisions and districts soon emulated the HQUSACE example. Agency policy required that the district engineer hold public meetings when proposing a project. The object was to give local interests "full opportunity to express their views on the character and extent of the improvement desired, on the need and advisability of its execution, and on their general willingness and ability to cooperate with the Federal Government."[51]

In the early to mid-1970s, a number of districts experimented with citizen advisory boards.[52] A flood control project in Minneapolis exemplified the new emphasis on public participation. To help plan the project on Bassett Creek, which runs through the city, the St. Paul District assisted in forming a nine-member commission composed of interested citizens rather than experts. The Corps developed a flood control plan incrementally with frequent input by the commission and its consulting engineer, and the Corps prepared an EIS in tandem with this process. A member of the commission, Edward Silberman, lauded the result. "In the Bassett Creek flood-control problem, incremental plan development has been so effective that the Commission did not have to take a formal vote to adopt its final plan," he wrote. "This was not an accident but rather the result of a carefully conducted melding of bureaucratic and public input by the Bassett Creek Flood Control Commission with important assistance from its consulting engineers."[53]

NEPA's EIS requirement also led the Corps to hire new staff with expertise in fisheries

biology, wildlife biology, archeology, history, economics and sociology. As a result of this infusion of new staff skills into the organization, the Corps acquired greater sensitivity to environmental concerns. The interdisciplinary team that prepared an EIS for a project was usually situated in an environmental branch attached to the Planning Division. Indeed, the basic function of the environmental branch was to produce EISs. One of the challenges in changing the internal organization of the Corps was to integrate these units effectively into corporate decision-making. Engineers referred to the new staff positions as the "exotic disciplines," and they tended to accord these specialists less respect than they did their fellow engineers. It took time to develop an interdisciplinary ethos in the agency.[54]

In the St. Paul District, the Environmental Branch was originally housed within the Engineering Division. The relationship was not a smooth one. The district's first chief ecologist, Dr. Barbara Gudmandson, was fired in December 1971. She appealed her dismissal and was reinstated in April 1972, but was replaced one month later by chief ecologist Keith B. Larson. A year-and-a-half after taking the job, Larson resigned in protest, claiming that the district engineer, Colonel Rodney Cox, had significantly altered a draft EIS, which in its original form found a proposed $18-million coal terminal at Pig's Eye Lake in St. Paul to be environmentally unsound. At a press conference, Larson also disclosed that someone in the Corps had altered the conclusions of several contracted environmental reports prepared by forty-five scientists from colleges and universities in Minnesota, Wisconsin and North Dakota. Environmental groups expressed concern. A Sierra Club spokesman charged the Corps with removing environmental staff whenever they became effective and called for an independent citizens' review of operations in the St. Paul District office. A representative of the Minnesota Environmental Control Citizens Association asserted that the district's environmental branch was "window dressing that has turned out to be pie in the face of the Corps."[55] These public controversies notwithstanding, the district stayed the course in its effort to integrate environmental review into its planning process.[56]

By 1980, the so-called exotic disciplines had made further inroads into the engineer-dominated agency. Some of the environmental staff was located in the Environmental Resources Branch under the direction of Robert Post, while some of it was in the Planning Branch headed by J. Robert Calton. Both of these staff groups remained in the Engineering Division under Roger Fast. Colonel Badger, district engineer, wanted to combine the two branches and elevate the latter to division status – separating the two staff groups from the Engineering Division. However, Calton and Fast, both veterans of more than thirty years in the district, opposed the change. Colonel Badger waited for the two men's retirements in 1980 and 1981, respectively, and then appointed Louis Kowalski as chief of the Planning Branch and moved him into an office next to his own. His new chief of the Engineering Division, Peter Fischer, occupied an office on the other side. The position of these offices on either side of the district engineer's office, Colonel Badger found, prepared the district staff for the change that followed one year later. With the approval of the Chief of Engineers, Colonel Badger created the Planning Division on April 4, 1982. He appointed Robert Post assistant chief of the Planning Division as well as

chief of the environmental resources staff.[57]

President Jimmy Carter and First Lady Rosslyn Carter on board the Delta Queen at Lock and Dam 6, on August 18, 1979. (Photo by Lyle Nicklay, courtesy of St. Paul District, Corps of Engineers)

The Planning Division took the lead in encouraging the Corps to embrace more environmentally sensitive approaches in its project designs. Certainly the clearest manifestation of the Corps' increasing sensitivity to the environment was its advocacy of nonstructural measures for flood control. Traditionally, the Corps supported structural improvements – primarily dams and levees – to reduce flood hazards. As Corps' planners increasingly took an interdisciplinary view of river systems and their floodplains, they favored alternatives to dams and levees. These included buyouts of private property in the floodplain (and relocation of existing buildings away from the floodplain) and other means of social engineering to change land uses in flood-prone areas.[58] In 1979, the St. Paul District produced a report on *The Development of Nonstructural Alternatives*.[59] The change from structural to nonstructural flood controls is discussed in more detail in subsequent chapters.

If diversification of staff specializations within the Corps was an important factor encouraging greater consideration of nonstructural projects, President Jimmy Carter's controversial reform effort was another factor. Carter saw a need to revise how the Corps justified civil works projects to Congress in order to make the Corps move away from its long-standing commitment to construction of dams and levees. The Corps' traditional emphasis on hard structures, Carter found, was embedded in the Flood Control Act of 1936 as amended in 1938. The law provided for full funding of flood control structures. Local communities were far more supportive of structural than nonstructural flood controls because hard structures, such as dams and levees, were federally funded while nonstructural remedies entailed costs that had to be born by local governments. In 1977, Carter issued executive orders and proposed legislation that aimed to end this bias by introducing cost-sharing requirements for local governments on all flood controls – regardless of whether they were structural or nonstructural. The Administration termed this initiative a "redirected public works program." Although Carter implemented the cost-sharing plan administratively, the plan did not receive congressional sanction until nine years later.[60]

As the Corps began to propose nonstructural solutions for flood control, environmental organizations took note. In 1975, *Audubon* ran an article praising the Corps' "new look" in flood

control. It cited the example of Prairie du Chien, Wisconsin, where the Corps recommended evacuation of the floodplain as the only economically justifiable solution to flood hazards. "No dams. No levees," *Audubon* commented. "Instead, the Corps recommended that one hundred and fifty-seven buildings be relocated out of the flood-prone area, that another forty-eight buildings be purchased and demolished by the federal government, that thirty-three homes be raised above flood levels, and that seven other buildings be flood-proofed. The Corps also recommended that the cleared floodplain become a greenbelt, protected by state and local regulation."[61]

Colonel William Badger, district engineer, and First Lady Rosslyn Carter. (Photo by Lyle Nicklay, courtesy of St. Paul District, Corps of Engineers)

Environmentalists were not the only group to note the change in the Army Corps of Engineers. Respected journals such as *The Nation* and *Business Week* commented on the Corps' new approach to flood control. The agency was adapting, these journals pointed out, because growing concern about the environment had exposed serious limitations in the Corps' traditional benefit-cost analysis of proposed projects. One writer characterized the organizational change in the Corps as an "internal struggle" between engineers trained to "optimize economic aspects" of a project and others who wanted to modify projects "to enhance or preserve the environment."[62]

The popular magazine *Ms.* examined organizational change in the Corps from a feminist perspective, noting not only the infusion of non-engineer specialists into the ranks of this peculiarly civilian unit of the Army but the Corps' push to recruit more women as well. Speaking of the latter initiative, one official was quoted, "We have a real shortage. We could use a lot more."[63] The increasing numbers of women in the Corps changed the face of the organization. The Corps was not alone in taking affirmative action to hire more women in the 1970s; other federal agencies with traditionally male-dominated staffs, such as the U.S. Department of Agriculture Forest Service, underwent a similar transition during the decade.

In the 1970s, the Corps of Engineers acquired a new mandate relating to environmental protection. It became the administrator of regulatory programs aimed at protecting the nation's wetlands. In 1972, Congress passed the Federal Water Pollution Control Act (later known as the

Clean Water Act). Section 404 of the law prohibited the discharge of dredged or fill material into the "waters of the United States" without a permit from the Army Corps of Engineers. During the next few years, environmentalists sought to affirm that the law applied to wetlands as well as navigable waterways. Environmentalists pushed the Corps to assert its regulatory responsibility under the law as widely as possible. Although the Corps initially resisted taking an aggressive stand on wetlands protection, judicial decisions in the mid-1970s forced the Corps to take a wider view of its "Section 404" responsibilities. According to historian Jeffrey K. Stine, the regulatory responsibilities of the Corps fundamentally altered its relationship with the environmental community. Some of the Corps' staunchest critics in the environmental community suddenly began courting the Corps because of its key role under Section 404 of the Clean Water Act.[64]

The evolution of the Corps' regulatory program for the protection of wetlands and the regulatory activities of the St. Paul District in Minnesota and Wisconsin will be discussed in detail in another chapter. Suffice it to say here that Section 404 of the Clean Water Act had a profound effect on the Corps' organization. To staff the program, the Corps recruited ecologists who specialized in ecological processes and values associated with wetlands, and it hired biologists who specialized in aquatic flora and fauna. Like the interdisciplinary teams that prepared EISs, the ecologists and biologists who evaluated Section 404 permit applications brought new perspectives to the organization. By 1991, the Section 404 permitting program funded thirty-one positions, including field office positions located at Bemidji and Duluth, Minnesota, and Waukesha, Fox River, Green Bay and La Crosse, Wisconsin. Ben A. Wopat was chief of the Regulatory Branch, which was attached to the Construction-Operations Division.[65] By 2001, the Regulatory Branch had grown to thirty-nine positions with field offices in Two Harbors and Brainerd, Minnesota, and Waukesha, Green Bay, Stevens Point and La Crosse, Wisconsin. Robert J. Whiting was chief of the Regulatory Branch, while Wopat was assistant chief of the Construction-Operations
Division.[66]

The St. Paul District's Section 404 responsibilities involved the organization directly with state officials in Minnesota and Wisconsin. For purposes of wetlands regulation, the St. Paul District's jurisdiction covered all of these two states. The district boundaries followed state lines rather than watersheds. The staff was organized into sections, one for each state. From 1977 to about 1987, there was a Surveillance and Enforcement Section. In the 1990s, a Metro Permit Section was created. The locations of some of the field offices changed frequently.

Organizational changes in the Corps provided tangible evidence that it was adapting to new public concern for the environment. Changes in staff organization and personnel enabled the Corps to address new legal requirements, such as the EIS, effectively. Organizational changes facilitated the Corps' move toward nonstructural approaches to flood control and its increasing role in environmental protection – particularly wetlands protection. How these changes became manifested in particular projects and programs will be explored in subsequent chapters.

Improvements in Business Operations

The civil works program was once the lifeblood of the Corps of Engineers, and new civil works projects were what sustained the program.[67] As the average size of new civil works projects decreased in the 1960s and 1970s, the administrative cost of moving any given project through consecutive phases of planning, design and construction rose proportionally. Moreover, small projects sometimes brought the Corps into direct competition with private-sector engineering firms, further highlighting the cost of its project-related work. By the mid-1970s, the Corps faced significant pressure to reduce costs. During the next two decades, the Corps introduced various new approaches in how it funded and managed civil works projects. Two initiatives were of particular importance: *cost-sharing* and *project management*.

While these initiatives developed out of specific changes in the Corps' civil works program – namely the smaller size of projects and the Corps' greater sensitivity to the environment – they

Prairie du Chien, Wisconsin, nonstructural flood control project: In 1978, the city of Prairie du Chien relocated numerous residents whose homes stood in a floodplain. This house was the first to be moved under guidelines jointly developed by the St. Paul District and the city. Shown here is the homeowner, a man in his eighties who had built the house himself more than fifty years earlier. (Photo courtesy of St. Paul District, Corps of Engineers)

also mirrored much broader public concerns about the federal bureaucracy. Public confidence in government fell sharply in the 1960s and early 1970s in response to the U.S. embroilment in Vietnam, the civil unrest in American cities, the degradation of the environment and, finally, the Watergate scandal. In the last quarter of the twentieth century, U.S. presidents made various attempts to reform the federal bureaucracy and to overcome the deep public cynicism toward government. President Jimmy Carter saw the public's cynicism as rooted in mistrust of public officials and sought to restore government's credibility. President Ronald Reagan responded to the public's disillusionment by promising to cut taxes and to get government off people's backs. President Bill Clinton believed the way to restore public confidence in government was to make bureaucracy function more efficiently, in large part by making it emulate certain aspects of the private sector. Organizational changes in the Corps mirrored these presidential initiatives, each of which cut across the whole federal bureaucracy: a heightened commitment to openness and accountability in the Carter years, an emphasis on downsizing and cost reduction in the Reagan-Bush years and a commitment to innovation and efficiency in the Clinton years. Not since the Progressive Era and the New Deal had the United States experienced such a sustained effort to reform how its government worked.

Some of the initiatives designed to make the Corps more open to public scrutiny and public input have been discussed above. The St. Paul District supported efforts in the 1970s to involve the public in decision-making through citizen advisory boards and hearings on EISs. In May 1979, President Carter introduced legislation aimed at stimulating greater involvement by state and local governments in the Corps' civil works projects through mandatory cost-sharing. He proposed a requirement that state and local governments contribute 5 to 10 percent of the cost of each new river or harbor improvement project. In addition, state governments would contribute 5 percent and local governments would contribute 20 percent of the cost of each new flood control project. The state or local government would be responsible for its share of the cost from the project's inception – beginning in the planning phase. Carter contended that the requirement for local participation would increase the quality of consideration of potential projects, "thereby improving the public's ability to judge the comparative merits of many water project opportunities." By the same token, it would give state and local governments a firmer role in rejecting unwanted federal projects.[68] Congress did not pass this legislation, though it would adopt the cost-sharing model seven years later in the Water Resources Development Act of 1986. In the meantime, the Corps moved to implement cost-sharing agreements administratively wherever state and local governments were willing to cooperate.

For many flood-prone communities in the St. Paul District, the cost-sharing initiative was unwelcome. The editors of Fargo's *The Forum* objected that the partnership would be unequal. "Hardly any state has the experience in construction of water projects that has been amassed by the Army Corps of Engineers and the U.S. Bureau of Reclamation," they noted. Most of the obvious water projects were already built, so it was unfair to require state and local governments

to share costs of determining whether water projects were economically feasible.[69] The St. Paul *Pioneer Press* was more receptive to the Carter proposal but agreed with *The Forum* that the legislation would not pass Congress. Environmental groups, meanwhile, wanted the states to contribute up to a fourth of the cost of water projects.[70]

The Reagan Administration intensified the push to implement cost-sharing agreements between the Corps and state and local governments. After Reagan took office, Colonel William W. Badger, district engineer, was surprised by the strength and swiftness of the message that the new Administration delivered through Headquarters to the district engineers. "The essence of the new policy arrived very quickly and the comments about what we could say and could not say about cost sharing were very exact," Badger said in a March 1982 interview. The intent of the policy was to shift some of the burden and responsibility for civil works from the federal to the state level. Ironically, Badger noted, in its haste to federalize or decentralize the Corps' operation, the Administration was moving the Corps "toward a more centralized operation." Like a good soldier, Badger delivered the new Administration's message that new projects would require significantly greater state and local participation.[71]

Colonel Ed Rapp, who replaced Colonel Badger as district engineer in 1982, continued to take the Reagan Administration's message to state and local governments within the St. Paul District. He held cost-share discussions with Wisconsin state officials over a highway project at La Crosse. In Minneapolis, city officials "signed up for cost sharing" on the Bassett Creek flood control project. In North Dakota, Rapp held "preliminary" but "significant" discussions concerning cost-sharing at Lake Darling. When the City of Rochester in Minnesota refused to share costs with the Corps for flood control on the South Zumbro River, Rapp was philosophical: "They could afford cost sharing," he told an interviewer. "They just chose to see if they could get a better deal somewhere else." Much of the colonel's discussion with local sponsors remained theoretical, while Congress deliberated over the cost-share proposal, laying the groundwork for future projects. "The Administration is getting in their licks," he commented, "and I was glad we were able to support the Administration's firm position."[72]

In addition to wanting more cost-share agreements, the Reagan Administration sought to accelerate and streamline the Corps' planning process. It wanted faster decisions, more results, less study. "Signals very quickly came down through the system," Badger recalled. "People were stating over and over again that government should get off the people's backs."[73] In particular, the Corps' Section 404 program for the protection of wetlands came under attack. The Reagan Administration criticized the Corps' permitting as excessively ponderous and obstructionist, and it wanted the Corps to streamline its process for reviewing and issuing permits.[74] While this position found congressional support in some parts of the country, it was not popular in Minnesota and Wisconsin. The people of Minnesota and Wisconsin were generally sensitive to loss or degradation of wetlands, since the region contained such an abundance of wetlands, lakes, rivers and potholes, and they did not want to roll back the Corps' involvement in wetlands protection.

Construction on the South Fork Zumbro River Flood Control Project, 1993: Although the City of Rochester initially balked at cost-sharing measures, the project later became one of the St. Paul District's showcases for how to involve communities in flood control. (Photo courtesy of Russel Snyder, St. Paul District, Corps of Engineers)

As the Reagan Administration moved to weaken the Corps' Section 404 program nationwide, the St. Paul District worked hard to preserve its cooperative relations with the state governments. The greatest challenge to the Section 404 program in the St. Paul District, in Colonel Badger's view, was that the Corps was regulating with uniform regulations nationwide when the regions were "drastically different." The states of Minnesota and Wisconsin wanted more stringent standards than the Corps could support in other regions.[75]

Congress passed the Water Resources Development Act of 1986, or WRDA-86, ending a decade-long stalemate over the Army Corps' civil works program. This landmark act not only included new project authorizations – the first in twelve years – but also added force to the Corps' efforts to develop more responsive and cost-efficient ways of conducting business. WRDA-86 required the Corps to obtain cost-share agreements with local sponsors for virtually all new flood control projects. In general, the non-federal share was between twenty-five and fifty percent of the cost of the project, with at least five percent cash. Since the federal government would no longer bear the entire cost of acquiring land and relocating buildings out of the way of reservoirs, the law made future reservoir projects much less likely. WRDA-86 also required local

sponsors contribute fifty percent of the cost for feasibility studies. This provision had two major consequences. First, it significantly reduced the number of feasibility studies undertaken, since local sponsors were reluctant to fund a feasibility study when the project authorization was in doubt. Second, it encouraged the local sponsor to take a much larger role in the project through its design and construction phases. WRDA-86 placed an even heavier burden on the local sponsor for coastal harbor projects (a provision that did not adversely affect the St. Paul District). It did not require cost-sharing for inland waterways; however, Section 1404 imposed a fuel tax on commercial users. Revenue collected from the fuel tax would eventually contribute fifty percent toward new inland waterway projects through the Inland Waterways Trust Fund.[76]

WRDA-86 energized the Corps. As so many years had elapsed without the passage of a water resources bill, people began to wonder what would happen to the Corps' civil works mission. Was the Corps simply going to do maintenance on existing projects and use the continuing authorities program to complete those projects that had been in progress for the past twelve years? WRDA-86 gave the Corps a more promising future, and it ratified the move toward cost-sharing that the Corps had been slowly implementing without congressional sanction since the Carter years. Colonel Joseph Briggs, St. Paul District commander when WRDA-86 was passed, described the effect as dramatic. "This [was] brand new in terms of how we were going to cost share and all of the new requirements placed upon different customers, whether the customers were within the Corps or outside of the Corps," Briggs commented in 1988.[77]

As new cost-share projects came on line, the Corps gained experience in its new relationship with local sponsors or "partners." Much effort went to cost-accounting so that sponsors would be cooperative and responsible in making regular payments to keep the project running. Colonel Roger L. Baldwin, St. Paul District commander from 1988 to 1991, commented that this first stage in the new relationship was developing smoothly. "We go out monthly and tell sponsors that they've got to have a check for so much in to the Treasurer or in to the Finance and Accounting Officer by such a date so that we can maintain the financial progress of the project, and we've had, happily, no problems here," he told an interviewer in 1991. "That system is established and working well." Baldwin anticipated that project closeouts, when both parties conduct final audits and reconcile their respective allowable costs, might raise disputes. Although the St. Paul District was keeping financial records for each project, it had not yet closed out any projects nor had it developed procedures for working with sponsors in that area.[78]

Partnering with local sponsors occasionally led to disputes and the threat of litigation, as when the City of Minneapolis disputed real estate credits in cost-accounting for the Bassett Creek Project. To keep such disputes out of the courts, the Corps developed a process called Alternative Dispute Resolution in 1988. As Chief of Engineers Arthur E. Williams explained the program, Alternative Dispute Resolution "helps to create an atmosphere in which the clash of alternative viewpoints can be synergized into creative solutions. A neutral, third party mediator helps find a middle ground to facilitate decisions which are acceptable to all parties."[79] The St. Paul District

was the first in the nation to use Alternative Dispute Resolution to resolve a real estate credit dispute.[80]

Another aspect of cost-sharing was the need to demand decisions by the sponsor to keep a project moving. Delays drove up costs. In one case, the St. Paul District redesigned a project five times before the local sponsor approved it. Colonel Richard W. Craig, St. Paul District commander from 1991 to 1993, suggested that the Corps, and the St. Paul District in particular, had to get "a little tougher" with local sponsors who hesitated to make decisions. "We have small communities out there that have a tough time coming up with the money," he stated. The St. Paul District had exceptionally good relations with partnering communities, Craig noted, but project costs were higher as a result.[81] By the mid-1990s, the St. Paul District's costs for engineering design were running ten to twelve percent higher than most other districts. Since the entire Corps performed engineering design at about ten percent higher cost than private engineering firms, the St. Paul District ran the risk of losing customers to the private sector.[82]

As more cost-sharing projects developed, it became clear the Corps must adopt a new process for moving projects through their planning, design and construction phases more efficiently. The Corps' traditional method of managing feasibility studies and projects was termed "functional management." A project was passed from planning to engineering to construction, or from one functional unit to the next, and each functional unit assigned a different manager to the project. Project review occurred vertically in the organization. Planners at the district level, for example, submitted their work to planners at the division and headquarters levels. The problem with this process was that projects frequently bounced back and forth from one functional unit to another, with no single person responsible for keeping the project on schedule and on budget. Working within what were referred to as "stovepipes," staff members became invested in their functional unit rather than in each project.[83]

The St. Paul District began experimenting with project management before other districts. Colonel Badger detailed what he termed "management by objective" in a memorandum dated April 30, 1981.[84] Project managers had oversight of projects, but functional managers supervised the technical people who performed the engineering or environmental work on projects. It was a "matrix system" in which project managers and functional managers shared dual supervision over the staff. In an effort to promote teamwork – one of the essential goals of project management – Badger contracted with a consultant to conduct team-building courses for the Engineering Division and the project managers. He also emphasized cross-training in order to improve communication between functional units.[85]

Without firm direction from Headquarters, however, the stovepipes continued to operate in spite of the district commander's best efforts to move projects along. After three years as district engineer, Badger expressed great frustration with the technical staff members who held projects back. Increasingly, he went to congressmen and senators to apply outside pressure on the Corps

in order to work projects through the system. "I have come to the conclusion … I can't just wait until all the minutia is done before sending a project forward and the technocrats or termites, the minutia people at that level, ask a lot of questions and send it back," he told an interviewer in 1981. "I can't live with a system that runs back and forth between termites. What I have to do is wrap up my projects, kick them up to the higher Headquarters." To his chagrin, Badger found himself in favor of "going outside the system, getting the language written into law so that the Corps system is short-circuited."[86]

Site survey: Mike Dahlquist (left) and Jim Sentz look at survey information for the St. Cloud, Minnesota, erosion control project. (Photo by Shannon Bauer, courtesy of St. Paul District, Corps of Engineers)

Discussion of the need for changing the "Corps system" intensified after Congress passed WRDA-86. Cost-sharing highlighted how often the Corps understated project costs and fell behind with project schedules. In response, the Corps adopted a new method of operations, modeled after the private sector, which it called "project management." Initiative 88, distributed to all district engineers in July 1988, called for a project manager to be assigned to each civil works project. The project manager was responsible for keeping projects on schedule and on budget. The project manager oversaw a team of specialists drawn from the different functional units within the district office.[87] In practice the team remained fluid, but the project manager generally stayed with the project and provided continuity through the life of the project.[88] The project manager also served as a consistent contact for the local sponsor and others outside the Corps who had an interest in the project – an important public relations feature of project management known as "one door to the Corps."[89]

Under Initiative 88, Headquarters directed each district office to implement project management. All district commanders were directed to appoint a civilian as a deputy district engineer for project management, or DDE (PM). (Later the acronym changed to DPM, which was an abbreviation for deputy district engineer for program and project management.) Although the DPM reported to the district engineer, headquarters created an Office of Project Management that fostered and protected the development of project management. Under the Chief Engineer's

directive, the new organizational structure was to be established without adding new staff positions.[90]

Project management introduced a matrix system – it did not do away with the functional units. The project managers had two significant limitations: they did not have any control over year-to-year project funding, which remained in the hands of Congress and the president, and they did not control the resources, which were still organized by function. Nonetheless, the project managers were supported as leaders in the new system. Chief of Engineers Lieutenant General Henry Hatch affirmed that the deputy district engineer for project management had equal rank with the chiefs of engineering and construction in each district. Hatch established a Project Management Division at the headquarters level and directed district engineers to create similar divisions. By 1991, the St. Paul District had a Programs and Project Management Division. In effect, the project management initiative resulted in its own stovepipe.[91]

The St. Paul District made a relatively smooth transition to project management. It had been a leader in developing interdisciplinary teams during the 1970s and 1980s and anticipated the push from Headquarters.[92] It easily implemented procedures that were developed for the whole Corps, notably Life Cycle Project Management. District commanders provided project team meetings. They fostered better communication between functional division chiefs and project managers. Problems with the matrix organization persisted a decade after Initiative 88, however, particularly among some of the senior civilians. As District Engineer Colonel Kenneth Kasprisin remarked, "Anytime you change people, process, organization, or culture, it creates other issues … People get into a very comfortable routine, and anything that takes them out of that routine, out of that comfort zone, brings consternation."[93]

Cost-sharing and project management were the big drivers of internal organizational change in the 1980s and 1990s, but the Corps pursued other innovations as well. Following the National Performance Review by the Clinton Administration in 1993 and passage of the Government Performance and Results Act later that year, the Corps furthered its efforts to streamline procedures. In 1996, for example, the Corps revised its document review process to eliminate redundancies at the headquarters, division and district levels. To Headquarters fell the task of "policy review" – ensuring the Corps complied with law and administration policy. Divisions limited their review to "quality assurance review" – ensuring quality of planning and engineering in accordance with approved quality assurance plans implemented for each district. Districts were responsible for "technical review" – controlling the technical adequacy of the planning and engineering documents. Previously, the review process wended through the district, division and Headquarters of the Army Corps and could include the former Washington Level Review Center, the Assistant Secretary of the Army (Civil Works) and the Office of Management and Budget as well. The revised review process compressed review time and reduced costs.[94]

While the National Performance Review and the Government Performance and Results Act

provided a certain amount of philosophical guidance to the Corps' reorganization efforts, much change resulted simply from the brute requirement of having to reduce full-time equivalent employees to mandated levels. Critics referred to this hatchet method of change as "salami slicing." Across the nation, efforts to "downsize" the Corps resulted in a reduction of 1,770 FTEs, or about six percent of the workforce, between 1990 and 1995.[95]

Conclusion

In the last quarter of the twentieth century, the Corps faced two imperatives for organizational change. First, environmentalism created a host of new public values and legislative mandates to which the Corps responded. Second, government reform initiatives led the Corps to introduce fundamental changes in how it conducted business. These new imperatives forced change in the St. Paul District in two ways. Sometimes the district responded to decisions that occurred at a higher level in the Corps, the Administration or Congress, as with realignment of district boundaries and staff reductions. In other instances, the district took initiative in developing new approaches to its work, as when it teamed with local citizens on the Bassett Creek Flood Control Commission. Environmental Impact Studies, public review, cost sharing, project management – these were the mechanics of internal organizational change in the Corps in the 1970s, 1980s and 1990s. In the following chapters, we will see how the St. Paul District put these new mechanisms to work in executing the Corps' various missions.

Chapter Two Endnotes

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